

ABSTRACT

Effect of Methanol Extract of Leaves of The Kaffir Lime (*Citrus hystrix*) as Biolarvasida to Changes In Histology of The Larvae *Aedes aegypti* Midgut

Objective: to know the effect of methanol extract of larvasida leaves of the Kaffir lime (*Citrus hystrix*) against death and damage larvae midgut *Ae. aegypti*. Research methods: this research is purely experimental use method *Post test Only Control Group design*. The sample used were 20 tail larvae *Ae. aegypti* instar III. The concentration of methanol extract of leaves of the Kaffir lime to be tested is 0 ppm (negative control), 500 ppm, 1500 ppm, 2500 3500 ppm, ppm, and 4500 ppm and 1 ppm temephos (positive control). Results of research: One way-ANOVA the average number of larvæ dead 24 hours after granting extract to group P0; P1; P2; P3; P4; and P5 each is 20 larvae analysis gave significant difference at level $P = 0.000$ with $\alpha = 0.05$, regression analysis gave equalition $Y = 0,020X + 20.54$. Conclusion: (1) the methanol extract of leaves of the Kaffir lime (*Citrus hystrix*) has the effect of larvasida against the larvae of *Ae. aegypti*. (2) the value of toxicity (LC_{90}) as biolarvasida larvae of *Ae. aegypti* the methanol extract of leaves on *C. hystrix* of 2.671,933 ppm. (3) There are changes in midgut digestive tract histology on the larvae of *Ae. aegypti* after exposed to *C. hystrix* leaf extract.

Key words: *Citrus hystrix*, *Aedes aegypti*, biolarvasida, histology midgut.